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| APPLICATION NO. | FILING DA | TE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------------------------|-------------|------------|-------------------------|---------------------|------------------|
| 09/867,911 | 05/30/20 | 01 | Robert Russell Cutlip | 5577-240 | 7556 |
| 20792 | 7590 05 | 5/19/2004 | | EXAMINER | |
| | IGEL SIBLEY | ZHEN, LI B | | | |
| PO BOX 37428 RALEIGH, NC 27627 | | | | ART UNIT | PAPER NUMBER |
| | | | | 2126 | 5 |
| | | | DATE MAILED: 05/19/2004 | | |

Please find below and/or attached an Office communication concerning this application or proceeding.

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| | Application No. | Applicant(s) | | | | |
|---|---|------------------------|--|--|--|--|
| | 09/867,911 | CUTLIP, ROBERT RUSSELL | | | | |
| Office Action Summary | Examiner | Art Unit | | | | |
| | Li B. Zhen | 2126 | | | | |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply | | | | | | |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). | | | | | | |
| Status | | | | | | |
| 1) Responsive to communication(s) filed on 08 March 2004. | | | | | | |
| 2a) This action is FINAL . 2b) ⊠ This | This action is FINAL . 2b)⊠ This action is non-final. | | | | | |
| • | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. | | | | | |
| Disposition of Claims | | · | | | | |
| · <u> </u> | | | | | | |
| 4) Claim(s) 1-19 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-4,6-12 and 15-19 is/are rejected. 7) Claim(s) 5,13 and 14 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. | | | | | | |
| Application Papers | | | | | | |
| 9)☐ The specification is objected to by the Examine | er. | | | | | |
| 10)☐ The drawing(s) filed on is/are: a)☐ acc | 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. | | | | | |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). | | | | | | |
| | Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 1) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. | | | | | |
| Priority under 35 U.S.C. § 119 | | | | | | |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. | | | | | | |
| | | | | | | |
| Attachment(s) | | | | | | |
| 1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) | | | | | | |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date | Paper No(s)/Mail Da | | | | | |

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DETAILED ACTION

1. Claims 1 - 19 are pending in the application.

Allowable Subject Matter

2. Claims 5, 13 and 14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claim 1 is rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent NO. 5,548,753 to Linstead.
- 5. As to claim 1, Linstead teaches a method of generating an electronic mail message [daemon process detects this record, reads the record, and prepares an electronic mail message; col. 3, lines 13 25], comprising:

automatically generating an electronic mail message [automatically prepares an electronic mail message and conveys the electronic mail message to the supervisor to provide an indication of the occurrence of the event; col. 13 – 49] responsive to an

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action [writing of a record in a table in the database; col. 3, lines 13 - 25] being performed on a database entry [application programs or 4th Dimension externals writes a record into the predetermined storage location or table upon the occurrence of a predetermined event within the database system; col. 7, lines 13 – 49].

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 7. Claims 1 3, 7, 8, 15, 16, 18 and 19 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent NO. 6,405,212 to Samu.
- 8. As to claim 1, Samu teaches a method of generating an electronic mail message, comprising:

automatically generating an electronic mail message [STARTUP trigger can have as an action to send e-mail to a system administrator; col. 15, lines 20 – 25; col. 13, lines 50 – 60] responsive to an action [INSERT, UPDATE, DELETE] being performed on a database entry [For triggers having a row scope, the selectable events are ERROR, SELECT, INSERT, UPDATE, DELETE; col. 8, lines 36 – 65].

9. As to claim 2, Samu teaches detecting performance of the action performed on the entry in the database [When any of the selectable events occurs during the process, as in step 612, the process checks... to determine if the flag for this event is "on" in step 616; col. 10, lines 33 – 62];

triggering a user defined function [stored procedure; col. 7, lines 40-60] (UDF) [For each loaded trigger... a region holding a block of code 811, 812 for the stored procedures of the conditions and actions; col. 11, lines 15-25] of the database [If the flag for this event is indeed on, a defined trigger is applicable, and the applicable trigger is fired at step 630; col. 10, lines 56-62] which provides access to an electronic mail system in response to the detection of performance of the action on the entry [user wants to fire a trigger when the event is that a particular database statistic has exceeded a threshold value. For example, a database administrator wants to send an electronic mail message (email) to the administrator's mailbox; col. 13, lines 50-60]; and

accessing the electronic mail system utilizing the UDF to request generation of the electronic mail message responsive to the UDF being triggered [STARTUP trigger can have as an action to send e-mail to a system administrator; col. 15, lines 20 - 25; col. 13, lines 50 - 60].

10. As to claim 3, Samu teaches establishing a database trigger [user is presented with controls that allow the user to select the event that will fire the trigger from a set of selectable events; col. 8, lines 37 – 67] associated with entries [row scope] in the

database [triggers having a row scope, the selectable events are ERROR, SELECT, INSERT, UPDATE, DELETE; col. 8, lines 57 - 65] which database trigger activates [col. 10, lines 56 - 62] the UDF [stored procedure; col. 7, lines 40 - 60] upon an action being performed on at least one of the entries associated with the database trigger [For each loaded trigger... a region holding a block of code 811, 812 for the stored procedures of the conditions and actions; col. 11, lines 15 - 25].

- 11. As to claim 7, Samu teaches the action performed comprises an insertion of the entry into the database [For triggers having a row scope, the selectable events are ERROR, SELECT, INSERT, UPDATE, DELETE; col. 8, lines 36 65].
- 12. As to claim 8, Samu teaches the database comprises a DB2 database [logical structures of a typical relational database system include the database which comprises one or more related database objects arranged into one or more schemas; col. 7, lines 43 60].
- 13. As to claim 15, Samu teaches a system for generating an electronic mail message, comprising:

means for detecting performance of an action performed on an entry in a database [When any of the selectable events occurs during the process, as in step 612, the process checks... to determine if the flag for this event is "on" in step 616; col. 10, lines 33 – 62];

means for triggering a user defined function [stored procedure; col. 7, lines 40-60] (UDF) [For each loaded trigger...a region holding a block of code 811, 812 for the stored procedures of the conditions and actions; col. 11, lines 15-25] of the database [If the flag for this event is indeed on, a defined trigger is applicable, and the applicable trigger is fired at step 630; col. 10, lines 56-62] which provides access to an electronic mail system in response to the detection of performance of the action on the entry [user wants to fire a trigger when the event is that a particular database statistic has exceeded a threshold value. For example, a database administrator wants to send an electronic mail message (email) to the administrator's mailbox; col. 13, lines 50-60]; and

means for accessing the electronic mail system utilizing the UDF to initiate generation of the electronic mail message responsive to the UDF being triggered [STARTUP trigger can have as an action to send e-mail to a system administrator; col. 15, lines 20 – 25; col. 13, lines 50 – 60].

- 14. As to claim 16, this is a product claim that corresponds to system claim 15; note the rejection to claim 15 above, which also meets this product claim.
- 15. As to claims 18 and 19, these are rejected for the same reasons as claim 7 above.

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Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

- 17. Claims 4, 9 12 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Samu in view of Linstead.
- 18. As to claim 4, Samu teaches generating an electronic mail message in response to an action being performed on an database entry [col. 13, lines 50 60], but does not specifically teach obtaining electronic mail information associated with the entry in the database and providing the obtained electronic mail information to an application program interface for the electronic mail system.

However, Linstead teaches a method of automatically generating an electronic mail message [col. 13 – 49] responsive to an action [writing of a record in a table in the database; col. 3, lines 13 - 25] being performed on a database entry [col. 7, lines 13 – 49], obtaining electronic mail information associated with the entry in the database [the record which is written to the predetermined storage location by the application program or external includes information needed to prepare the electronic mail message; col. 7, lines 47 – 65] and providing the obtained electronic mail information to an application program interface for the electronic mail system [4th Dimension externals 40 are programs written in a language such as C or Pascal which allow the addition of

operational features to the 4th Dimension database system. In particular, 4th Dimension externals 40 may access software routines and other tools in the Macintosh operating system 26, including the messaging portion 36; col. 6, lines 23 – 34].

- 19. It would have been obvious to a person of ordinarily skilled in the art at the time of the invention to apply the teaching of obtaining electronic mail information associated with the entry in the database and the information to an application program interface for the electronic mail system as taught by Linstead to the invention of Samu because this identifies a list of recipients of the electronic mail message and defines the format of the electronic mail message such as enclosures and content [col. 7, lines 48 60 of Linstead].
- 20. As to claim 9, Samu as modified teaches the UDF comprises a first class which obtains the electronic mail information [the record which is written to the predetermined storage location by the application program or external includes information needed to prepare the electronic mail message; col. 7, lines 47 65 of Linstead] and a second class which provides the electronic mail message information to the electronic mail system [4th Dimension externals 40 are programs written in a language such as C or Pascal which allow the addition of operational features to the 4th Dimension database system. In particular, 4th Dimension externals 40 may access software routines and other tools in the Macintosh operating system 26, including the messaging portion 36; col. 6, lines 23 34 of Linstead].

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- 21. As to claim 10, Samu as modified teaches the electronic mail system executes on a second data processing system remote from a first data processing system on which the database executes [use of a common data transport mechanism, electronic mail, that in turn allows all electronic mail users, whether local or remote, to receive information concerning data events and results taking place within a database environment; col. 9, lines 9 45 of Linstead].
- 22. As to claim 11, Samu as modified teaches generating an electronic mail message, comprising:

a database having database entries [Tables hold all of the user-accessible data arranged in rows and columns; col. 7, lines 40 – 60 of Samu];

a user defined function [stored procedure; col. 7, lines 40 – 60 of Samu] of the database configured to wrap access to an electronic mail system [4th Dimension externals 40 may access software routines and other tools in the Macintosh operating system 26, including the messaging portion 36; col. 6, lines 23 – 34 of Linstead] so as to generate an electronic mail message upon invocation of the user defined function [STARTUP trigger can have as an action to send e-mail to a system administrator; col. 15, lines 20 – 25; col. 13, lines 50 – 60 of Samu]; and

a database trigger [user is presented with controls that allow the user to select the event that will fire the trigger from a set of selectable events; col. 8, lines 37 – 67 of Samu] associated with at least one of the database entries [triggers having a row scope, the selectable events are ERROR, SELECT, INSERT, UPDATE, DELETE; col. 8, lines

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57 – 65 of Samu] and configured to invoke the user defined function [For each loaded trigger... a region holding a block of code 811, 812 for the stored procedures of the conditions and actions; col. 11, lines 15 – 25 of Samu] upon performance of an action on the at least one of the database entries [If the flag for this event is indeed on, a defined trigger is applicable, and the applicable trigger is fired at step 630; col. 10, lines 56 – 62 of Samu].

- 23. As to claim 12, this is rejected for the same reasons as claim 9 above.
- 24. As to claim 17, this is rejected for the same reasons as claim 7 above.
- 25. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Samu and Linstead further in view of "Introduction to the Java Mail API" (hereinafter Nemil).
- 26. As to claim 6, Samu as modified by Linstead teaches an application program interface [col. 6, lines 23 34 of Linstead] but does not specifically teach the JavaMail Application Program Interface.

However, Nemil teaches the JavaMail Application Program Interface [A close-up look at the Java Mail API; p. 1-2].

27. It would have been obvious to a person of ordinarily skilled in the art at the time of the invention to apply the teaching of the JavaMail Application Program Interface as

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taught by Nemil to the invention of Samu as modified because the JavaMail API provides a highly reusable and open API framework that emphasize on abstract interfaces in a way that supports existing standards but does not limit future enhancements [p. 1, 3rd paragraph of Nemil].

Conclusion

- 28. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
- U.S. Patent NO. 5,826,269 to Hussey teaches an electronic mail interface for a network server.
- 29. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Li B. Zhen whose telephone number is (703) 305-3406. The examiner can normally be reached on Mon Fri, 8:30am 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Meng-Ai An can be reached on (703) 305-9678. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Li B. Zhen Examiner Art Unit 2126

lbz May 12, 2004

SUPERVISORY PATENT EXAMINER

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